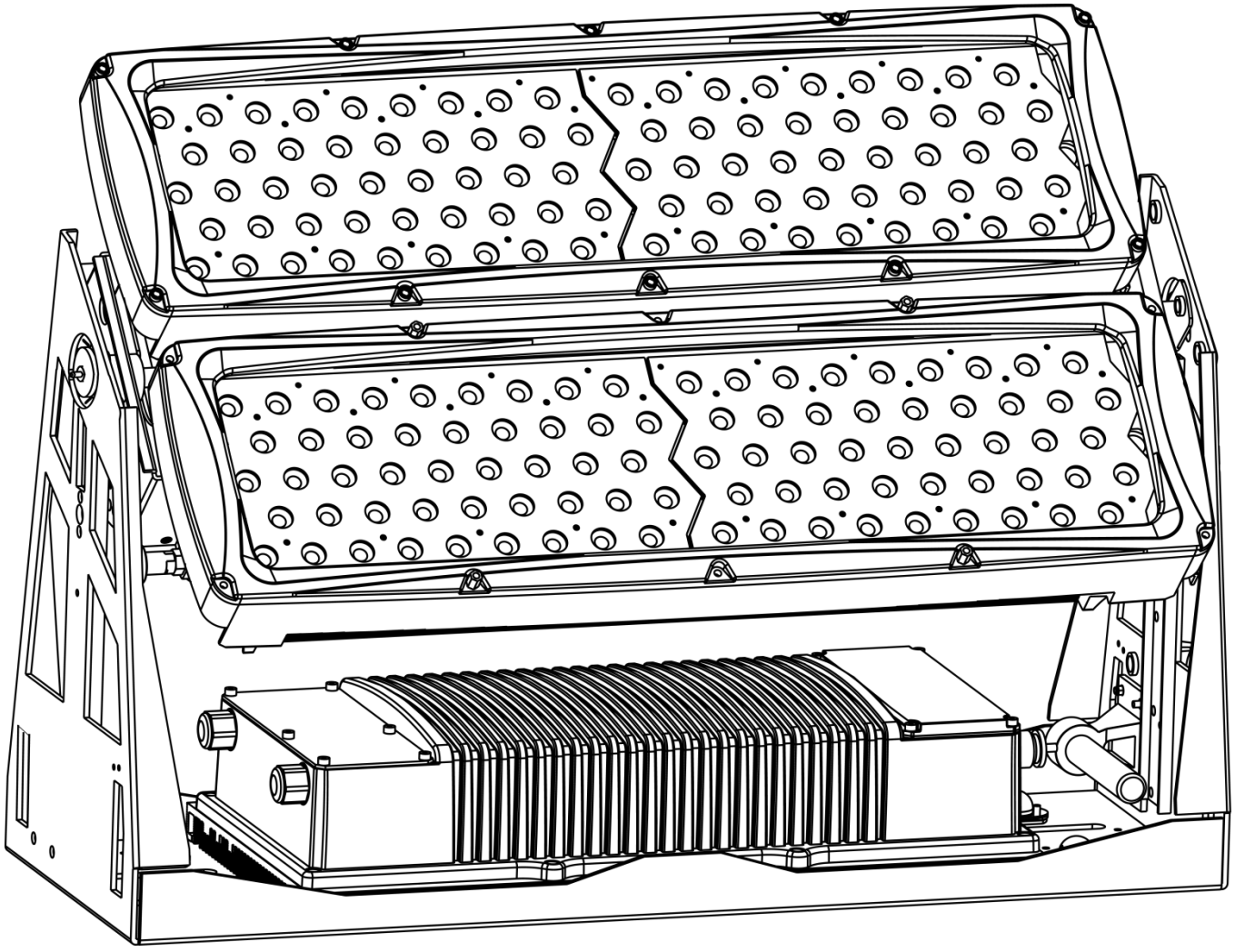
Ilumipanel 180 IP Optic 15/30 RGBWA

User Manual



ILUMINARC®

Edition Notes

The Ilumipanel 180 IP Optic 15/30 RGBWA User Manual Rev. 13 covers the description, safety precautions, installation, programming, operation, and maintenance of the Ilumipanel 180 IP Optic 15/30 RGBWA. ILUMINARC® released this edition of the Ilumipanel 180 IP Optic 15/30 RGBWA User Manual Rev. 13 in November 2015.

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Document Printing

For better results, print this document in color, on letter size paper (8.5 x 11 inches), double sided. If using A4 paper (210 x 297 mm), configure your printer to scale the content of this document to A4 paper.

Intended Audience

Any person in charge of installing, operating, and/or maintaining the Ilumipanel 180 IP Optic 15/30 RGBWA should read the Guide that shipped with it and this manual in their entirety before installing, operating, or maintaining this product.

Disclaimer

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Document Revision

The Ilumipanel 180 IP Optic 15/30 RGBWA User Manual Rev. 13 supersedes all previous versions of this manual. Please discard any older versions of this manual you may have, whether in printed or electronic format, and replace them with this version.

Author	Date	Editor	Date
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1. Introduction

This icon indicates useful, although non-critical information.

This icon indicates important installation or configuration information. Failure to comply with this information may prevent the product from functioning correctly.

This icon indicates critical installation, configuration, or operation information. Failure to comply with this information may render the product partially or completely inoperative, damage third-party equipment, or cause harm to the user

The term "DMX" used throughout this document refers to the USITT DMX512-A transmission protocol.

What Is In the Flight Case

- One Ilumipanel 180 IP Optic 15/30 RGBWA
- One Power Input Cable (Bare-Ended)
- One Data Input/Output Cable (Bare-Ended)
- One W-DMX Receiver
- Warranty Card
- Quick Reference Guide

Unpacking Instructions

Immediately upon receiving a product from ILUMINARC®, carefully unpack the flight case. Check the contents to ensure that all parts are present and that they are in good condition.

Claims

The carrier is responsible for any damage incurred during shipping. Therefore, if the received merchandise appears to have been damaged during shipping, the customer must submit the damage report and any related claims to the carrier, not ILUMINARC®. The customer must submit the report upon receipt of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to ILUMINARC® within seven (7) days of receiving the merchandise.

Text Conventions

Convention	Meaning
1~512	A range of values in the text
50/60	A set of mutually exclusive values in the text
"ILUMICON UM"	The name of another publication or manual
<SET>	A button on the product's control panel
Settings	A product function or a menu option
MENU > Settings	A sequence of menu options
1~10	A range of menu values from which to choose in a menu
Yes/No	A set of two mutually exclusive menu options in a menu
ON	A unique value to enter or select in a menu

Safety Notes

There are no user serviceable parts inside this product. Any reference to servicing you may find from now on in this User Manual will only apply to properly certified ILUMINARC® technicians. Do not open the housing or attempt any repairs unless you are certified to do so.

Please read all the following safety notes carefully because they include important information on how to install, use, and maintain this product safely.

Personal Safety

- Avoid direct eye exposure to the light source while the product is on.
- Always disconnect this product from its power source before servicing.
- Always connect this product to a grounded circuit to avoid the risk of electrocution.
- Do not touch this product's housing when operating because it may be very hot.

Mounting and Installation

Please refer to all applicable local codes and regulations for the proper installation of this product.

- This product is for outdoor use and can be submerged (IP67). However, do not submerge deeper than 1 m for more than thirty (30) minutes.
- CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.
- This product weighs 89 lbs. (40.3 kg). Always ask for help when mounting this product to avoid personal injuries or damage to the unit.
- Make sure there are no flammable materials close to this product while operating.
- When hanging this product, always secure it to a fastening device using a safety cable.

Power and Wiring

Keep this manual for future consultation. If you sell this product to another user, make sure that they also receive this manual.

- Always make sure that you are connecting this product to the proper voltage, as per the specifications in this manual or on the product's sticker.
- Never connect this product to a dimmer pack.
- Make sure that the power input cable is not cracked, crimped, or damaged.
- Never disconnect this product by pulling or tugging on the power input cable.

Operation

In the unlikely event that your Ilumipanel 180 IP Optic 15/30 RGBWA may require service, please contact ILUMINARC® Technical Support.

- The maximum ambient temperature is 104° F (40° C). Do not operate this product at a higher temperature.
- In case of a serious operating problem, stop using this product immediately!

2. Product Description

The Ilumipanel 180 IP Optic 15/30 RGBWA is a high intensity wash product used to light a variety of both indoor and outdoor applications

The Ilumipanel 180 IP Optic 15/30 RGBWA consists of a steel base and two adjustable panels. The base contains the power supply and the control unit. The panels are attached to the adjustable steel arms that come from the base. The DMX and power input and output are located on the power supply.

Features

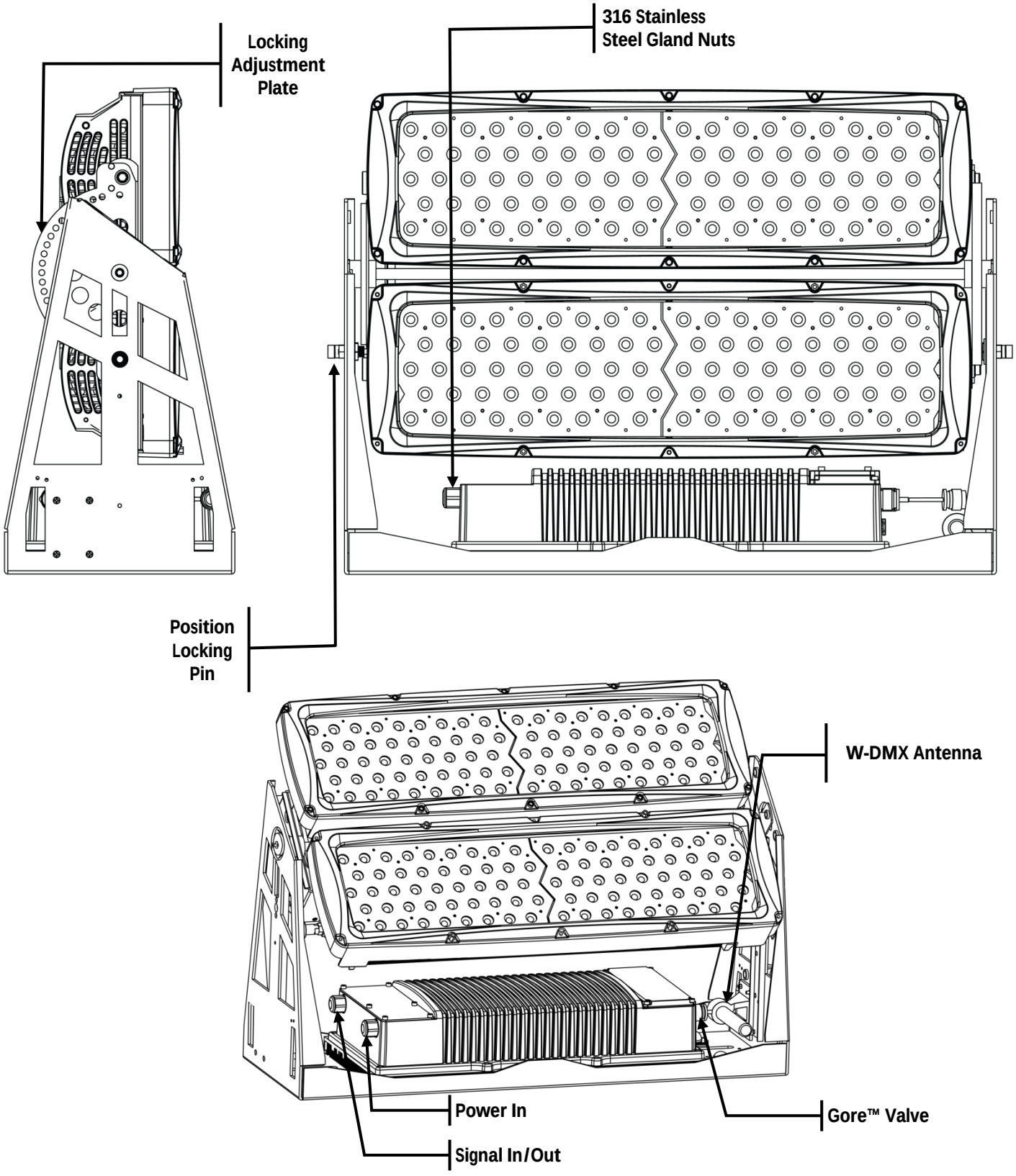
- 1, 3, 4, 5, 6, 7, 9, or 10 channel DMX-512 LED array light
- Operating modes:
  - 1-channel: Dimmer
  - 3-channel: RGB control
  - 4-channel: Dimmer, RGB control
  - 4-channel: RGBW control
  - 5-channel: Dimmer, RGBW control
  - 5-channel: RGBWA control
  - 6-channel: Dimmer, RGBWA control
  - 7-channel: Dimmer, RGB, color macros, strobe, dimmer speed
  - 9-channel: Dimmer, RGBWA control, color macros, strobe, dimmer speed
  - 10-channel: RGBWA control per module (two modules)
- W-DMX™
- Dual Vector Array™ LED panel positioning
- Five distinct dimming curves
- High power 5 W (700 ~ 1,000 mA) RGBWA LEDs
- IP67 with 316 stainless steel hardware
- Gore™ valve
- Cast and extruded aluminum with Integrated Cooling Enhancement™

Options

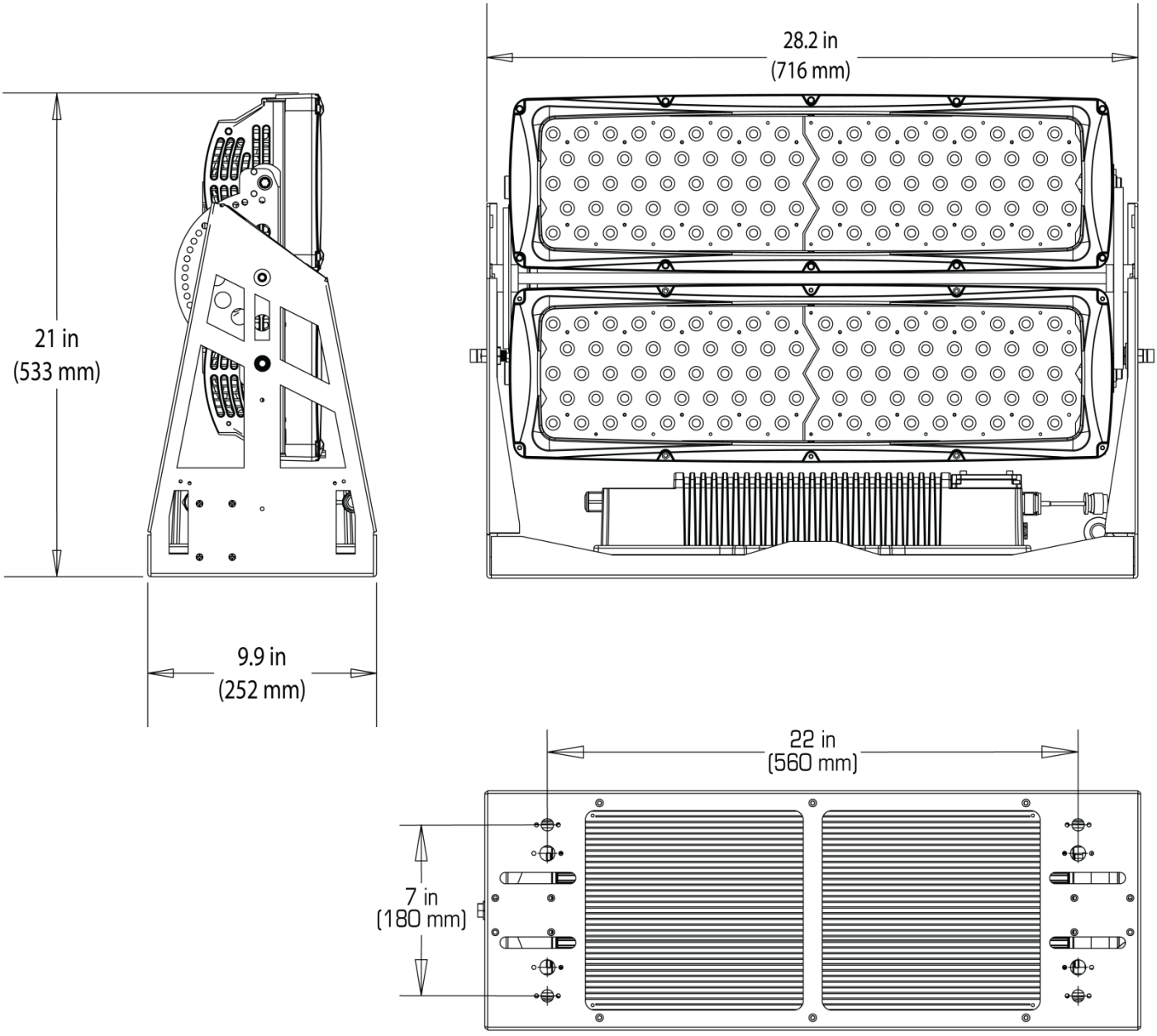
- Ilumicode addresser (required for product configuration)
- Installed (non-changeable) optical system:
  - 15° lenses - Product order code: 13180001
  - 30° lenses - Product order code: 13180002

- The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.
- The Ilumicoode addresser is required for product configuration (sold separately).

Product Overview



Product Dimensions



3. Installation

⚠ Make sure to mount this product away from any flammable material as indicated in the Safety Notes.

Mounting

Before mounting this product, read and follow the safety recommendations indicated in the Safety Notes section

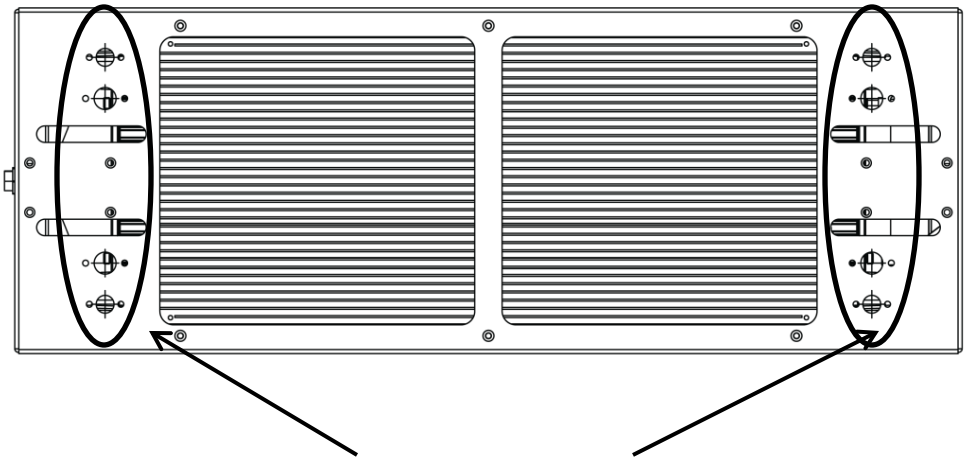
Orientation

Always mount this product in any safe position while making sure there is adequate room for ventilation, configuration, and maintenance.

Installation

The Ilumipanel 180 IP Optic 15/30 RGBWA has twelve (12) mounting points on the base of the product to secure to almost any surface. ILUMINARC® recommends following the general guidelines below when mounting the Ilumipanel 180 IP Optic 15/30 RGBWA.

- When selecting an installation location, consider ease of access to the product for operation, programming adjustments, and routine maintenance.
- Make sure that the location where you are mounting the product can support its weight. Please see the Technical Specifications section of this manual for the weight requirement of this product.



Always connect the Ilumipanel 180 IP Optic 15/30 RGBWA to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire.

Never connect the Ilumipanel 180 IP Optic 15/30 RGBWA to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

Make sure to connect the Ilumipanel 180 IP Optic 15/30 RGBWA product to a power line with the proper voltage and frequency, as per the specifications in this manual or on the product's sticker.

The listed current rating indicates the maximum current draw during normal operation.

If you choose to bury the power or signal distribution boxes, make sure that they are IP67 rated or greater.

AC Power

The Ilumipanel 180 IP Optic 15/30 RGBWA has an auto-ranging power supply that works with an input voltage range of 100~240 VAC, 50/60 Hz.

Make sure you are connecting this product to the proper voltage, as per the specifications in this manual or on the product's sticker.

Power Consumption

To determine the power requirements for the Ilumipanel 180 IP Optic 15/30 RGBWA, refer to the label affixed to the side of the product or refer to the Technical Specifications chart in this manual.

The listed current rating indicates the maximum current draw during normal operation.

AC Plug

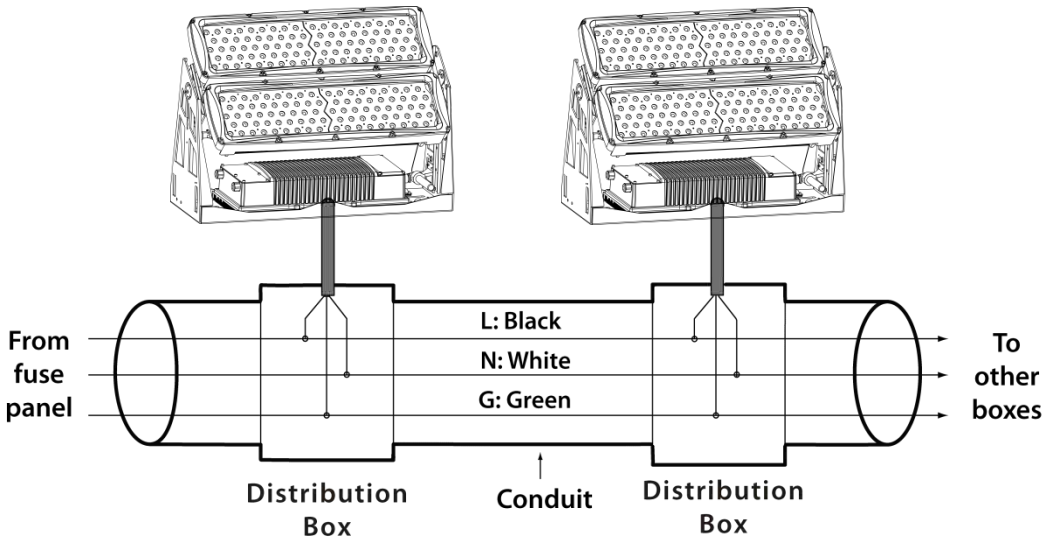
The Ilumipanel 180 IP Optic 15/30 RGBWA comes with an un-terminated power input cord for hardwiring during installation. Use the table and the illustration below to wire a plug.

Connection	Wire (US)	Screw Color (US)	Wire (Europe)	IP67 Pin
AC Live	Black	Yellow or Brass	Brown	1
AC Neutral	White	Silver or Gray	Blue	2
AC Ground	Green/Yellow	Green	Green/Yellow	3

Power Wiring

You can connect the bare-ended IP67 rated AC power cable from the product to an IP67 rated power connector or IP67 rated junction box.

If using junction boxes, make sure to use IP67 rated conduit for surface installations.



The units must be linked using DMX cable in a daisy chain (serial) fashion. To comply with the EIA-485 standard, no more than 32 units should be connected on one daisy chain without using a DMX optically-isolated splitter. Doing otherwise may result in deterioration of the digital DMX signal.

USITT recommends limiting the total length of the DMX cable (from the first unit/controller to the last unit) to 300 ~ 455 m (985 ~ 1,500 ft).

Disconnect the product from the AC power before opening it.

The signal cable must match or exceed the electrical characteristics of the Belden® 9841 cable for EIA RS-485 applications. You may also use CAT5, 5e, or CAT6 LAN cable.

DMX Linking

You may link the Ilumipanel 180 IP Optic 15/30 RGBWA to a DMX controller using a standard DMX serial connection or W-DMX™. If using other DMX units compatible with the Ilumipanel 180 IP Optic 15/30 RGBWA, you can control each product individually with a single DMX controller.

DMX Modes

The Ilumipanel 180 IP Optic 15/30 RGBWA uses the standard DMX data connection for **ARC1**, **ARC1+D**, **ARC2**, **ARC2+D**, **ARC3**, **ARC3+D**, **ARC FULL**, **REMOTE**, **SOLID**, **SPECIAL 1** and **SPECIAL 2**.

Refer to the Introduction chapter for a brief description of these modes and the Operation chapter to learn how to configure the Ilumipanel 180 IP Optic 15/30 RGBWA to work in these modes.

The DMX Values section will give you detailed information regarding the above-mentioned DMX modes. The highest possible starting address for each DMX mode are as follows:

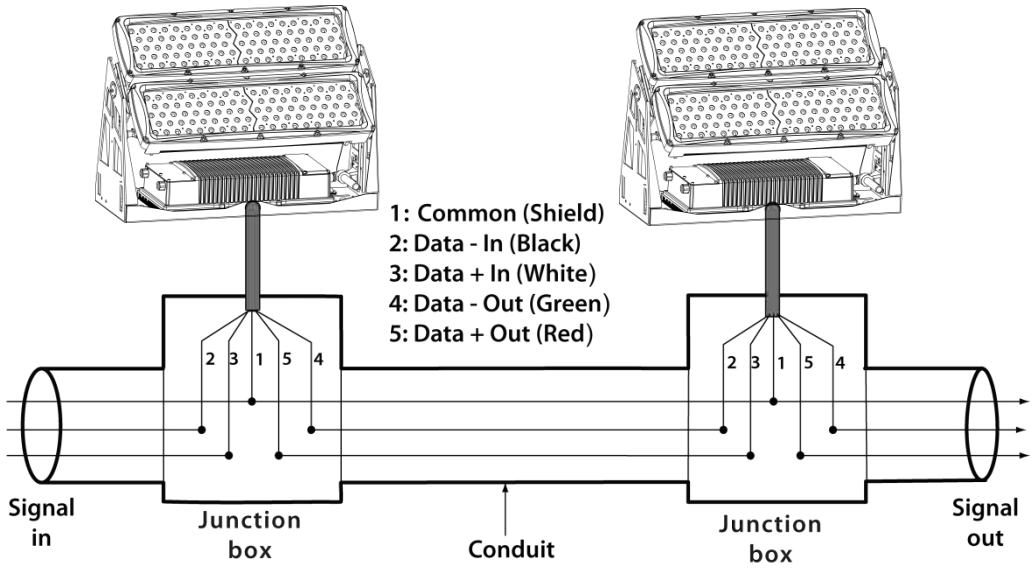
DMX Mode	DMX Address	DMX Mode	DMX Address	DMX Mode	DMX Address
ARC FULL	506	**ARC3**	508	**SOLID**	512
ARC1	510	**ARC3+D**	507	**SPECIAL1**	503
ARC1+D	509	**ARC3+S**	506	**SPECIAL2**	504

Signal Wiring

To provide signal for any of the Ilumipanel 180 IP Optic 15/30 RGBWA, you can connect the bare-ended IP67 rated signal cable from the product to two IP67 rated signal connectors (DMX in and DMX Out) or use an IP67 rated junction box. In this case, make sure to use IP67 rated conduit.

Protocol Connectivity

The Ilumipanel 180 IP Optic 15/30 RGBWA uses USITT DMX 512 Protocol. The procedure below illustrates the recommended connection method.



Controllers

The products in the Ilumipanel 180 IP Optic 15/30 RGBWA can operate with a standard DMX controller, the ILUMICON controller, or the Ilumicode addresser. The sections below will show you how to connect these products to the corresponding controllers.

The instructions to operate these products with each of the above controllers are in the Operation chapter of this manual. You may also choose to connect these controllers via W-DMX™.

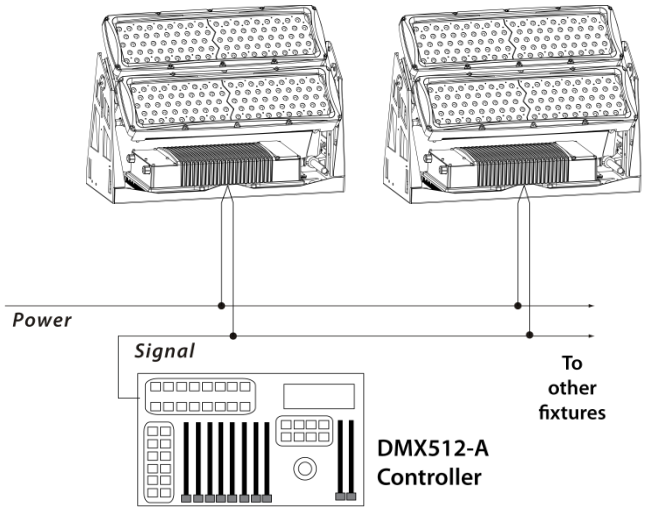
If you have not configured the DMX starting address and DMX mode for each product, they will all use their default values. This means that all products will operate in unison.

Refer to the W-DMX™ transmitter instructions provided with your transmitter and the W-DMX™ Calibration section of this manual to use this method.

DMX Controller

The Ilumipanel 180 IP Optic 15/30 RGBWA products can work with a standard DMX controller. The channel assignments will depend on the chosen personality (see the Menu Map section) and the DMX address assigned to each product (see Programming section).

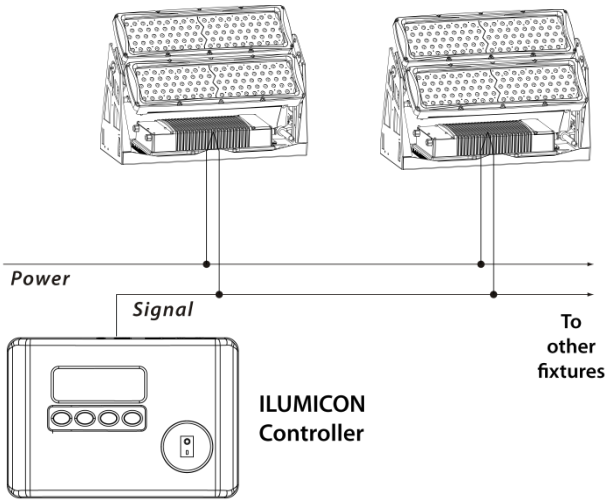
The figure below illustrates how to connect the DMX controller to the Ilumipanel 180 IP Optic 15/30 RGBWA products.



ILUMICON

The Ilumipanel 180 IP Optic 15/30 RGBWA can also work with the ILUMICON controller instead of a standard DMX controller. Please refer to the ILUMICON User Manual to learn how to use this controller with the Ilumipanel 180 IP Optic 15/30 RGBWA products. The following figure illustrates how to connect the ILUMICON controller to the Ilumipanel 180 IP Optic 15/30 RGBWA.

The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.



Ilumicode

The Ilumicode addresser (version 2.2 or higher) is required to program the settings on the Ilumipanel 180 IP Optic 15/30 RGBWA. The following diagram shows how to connect the Ilumicode addresser to this product.

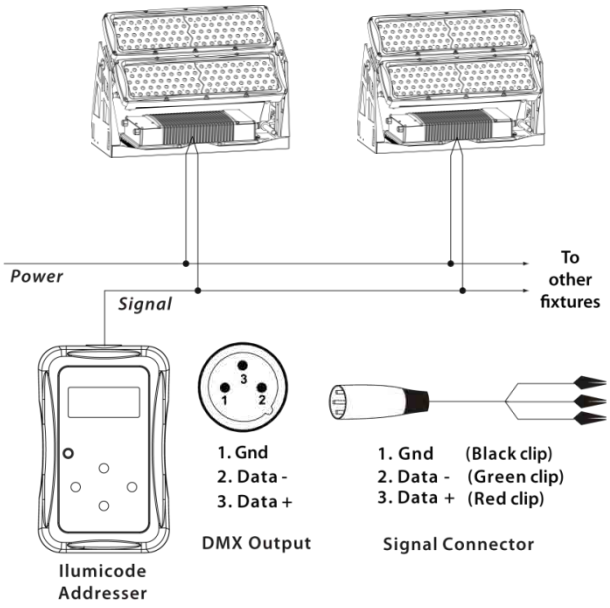
This connection will control multiple products at the same time. In addition, all connected products will be assigned to the same DMX address

Important: The Ilumicode must be used to configure this product. The Ilumicode can be purchased separately through your Iluminarc sales representative.

To assign individual DMX addresses to each product, you must connect the Ilumicode addresser to each product, individually.

The Ilumicode will not work via wireless. You must hardwire the Ilumicode directly to the Ilumipanel 180 IP Optic 15/30 RGBWA when programming the product.

ILUMINARC® suggests that you connect no more than 20 products together at one time with this controller and keep the total distance to less than 60 m (197 ft). Otherwise, you might need to use an optically isolated signal amplifier.



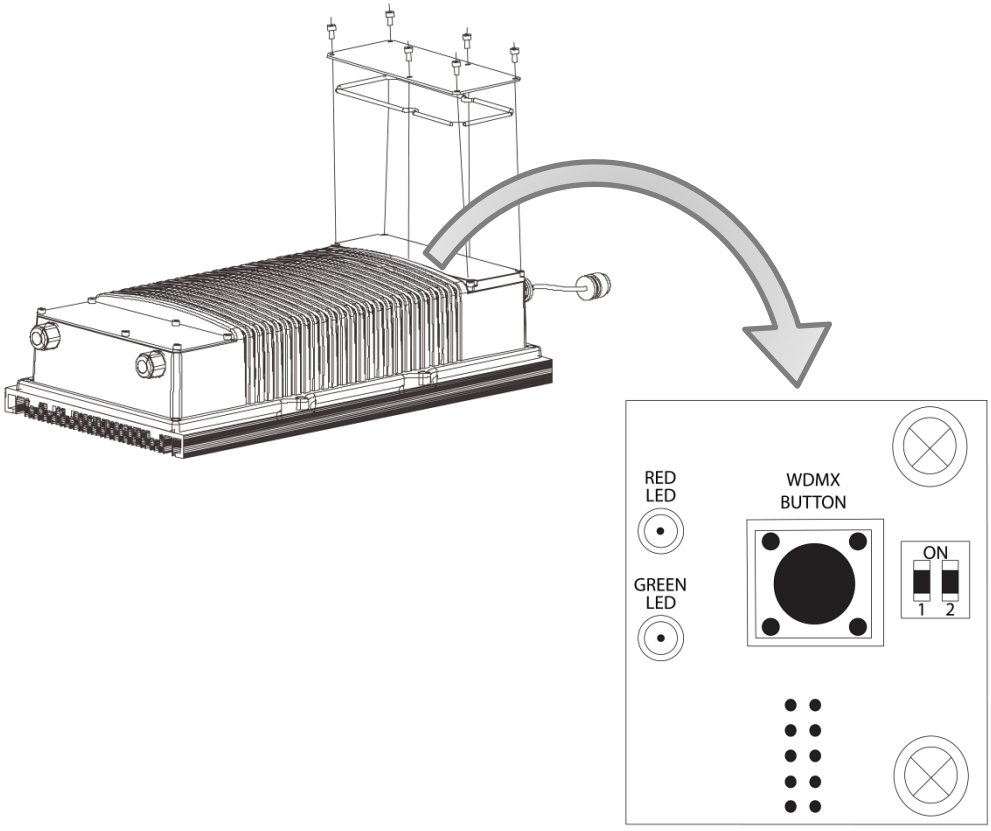
W-DMX™ Calibration

You can run the Ilumipanel 180 IP Optic 15/30 RGBWA without DMX cabling using the W-DMX™ option. This product can operate in W-DMX mode up to 300 m (900 feet) from the W-DMX transmitter. For wireless operation, the W-DMX receiver in the Ilumipanel 180 IP Optic 15/30 RGBWA must be paired with the W-DMX transmitter. Use the following instructions to operate.

The Ilumicode Addresser is required to send DMX addressing and personality information to the fixture.

Once W-DMX has been enabled, you cannot use the Ilumicode to make changes to the Ilumipanel 180 IP Optic 15/30 RGBWA. Changes made via the Ilumicode should be done prior to enabling W-DMX. The W-DMX takes priority control over the wired DMX cables.

1. Using the Ilumicode, set the personality and the DMX address to the Ilumipanel 180 IP Optic 15/30 RGBWA. (Refer to the programming section of the Operation chapter of the User Manual.)
2. Disconnect power and the Ilumicode from the product.
3. Open the cover next to the W-DMX™ Antenna by unscrewing the 6 Allen Screws using a 3mm angled Allen Key.
4. Reconnect power to product.
5. Press and hold the W-DMX™ button until the Green LED stops flashing.
6. Disconnect power to the product for approximately 10 seconds.
7. Reconnect power to product.
8. Locate the product by using the W-DMX™ transmitter. (Refer to the W-DMX™ transmitter instructions provided with your transmitter.)
9. Upon locating the product wirelessly, close the cover.
10. Tighten the Allen Screws uniformly by alternating between opposite screws to insure a tight seal.



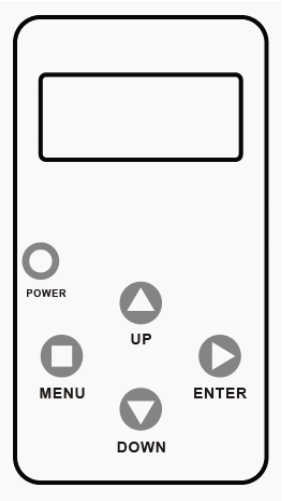
4. Operation

Ilumicode

The Ilumipanel 180 IP Optic 15/30 RGBWA needs an external controller, the Ilumicode addresser, to change its configuration.

Ilumicode Panel Description

Button	Function
<MENU>	Exits from the current menu or function
<ENTER>	Enables the currently displayed menu or sets the currently selected value into the selected function
<UP>	Navigates upwards through the menu list and increases the numeric value when in a function
<DOWN>	Navigates downwards through the menu list and decreases the numeric value when in a function
<POWER>	Turns the unit on. The unit will turn off automatically after 30 seconds of inactivity.



Control Options

You can set the Ilumipanel 180 IP Optic 15/30 RGBWA start address in the 001~512 DMX range. This allows for the control of up to 51 products in the 10-channel **Special 1** personality.

Programming

Carry out all the programming procedures indicated below from the control panel. Refer to the Menu Map section to learn how the menu options relate to each other.

Use **<ENTER>** and **<MENU>** to change levels in the *Menu Map*. This is equivalent to move right and left respectively. Use **<UP>** and **<DOWN>** to move vertically within the *Menu Map* options.

When you scroll through the menu options, you will see many of them that do not correspond with the menu map. Skip them, as they do not work with the **RGBWA** only output products.

DMX Personality

1. Go to **PERS** and select any DMX personality.
2. Make sure to rearrange the DMX addresses of all products in the current DMX universe to avoid address overlapping.

DMX Starting Address

1. Go to **DMX**.
2. Select a starting DMX address (**001~512**).

Static Colors

DIM1 is the fastest dimmer curve and **DIM4** is the slowest.

1. Go to **STATIC**.
2. Select a color or effect (**Red**, **Green**, **Blue**, **White**, **Amber** or **Strobe**).
3. Select a color value (**000~255**) or a strobe frequency (**0~20**).

Dimmer

This setting gives the user four different options to simulate the dimming curve of an incandescent lighting product.

1. Go to **DIMMER.**
2. Select a dimmer curve (**OFF** or **DIM1~4**).

Procedure:

DIMMER	Description
OFF	Dimmer curve is linear with fader
DIM1	Non-linear (fastest)
DIM2	Non-linear (fast)
DIM3	Non-linear (slow)
DIM4	Non-linear (slowest)

Color

1. Go to **SETTINGS** > **COLOR**.
2. Select the color method (**OFF**, **RGB TO W**, **UC**).

Procedure:

OFF

When the RGB faders are all set to "**255**", the output is maximum.

RGB TO W

When the RGB faders are all set to "**255**", the output is the selected White color (see Whites Setting).

UC

When the RGB faders are all set to "**255**", the output matches the same color output of previous versions of this product.

Whites Setting

1. Go to **CALIB**.
2. Select a white color (**WHITE 1~11**) or **RGB TO W.**
3. Select an RGB color (**Red**, **Green**, or **Blue**).
4. Configure the color value (**0~255**).
5. Repeat steps 3 and 4 for the other RGB colors to obtain a white color.
6. Repeat steps 2 to 5 for the other white colors.

Reset to Factory Settings

1. Go to **SETTINGS** > **RESET**.
2. Select an option (**YES/NO**).

Menu Map

Main Level	Programming Levels			Description
DMX	**001~512**	N/A		Sets the DMX starting address
PERSON	**ARC 1**	N/A		3-channel: RGB control
	ARC 1 + D			4-channel: RGB control + dimmer
	ARC 2			4-channel: RGBW control
	ARC 2 + D			5-channel: RGBW control + dimmer
	ARC 3			5-channel: RGBWA control
	ARC 3 + D			6-channel: RGBWA control + dimmer
	ARC FULL			7-channel: RGB control, dimmer, color macro, strobe, dimmer speed
	REMOTE			Allows using the ILUMICON unit
	SOLID			1-channel: dimmer
	SPECIAL 1			10-channel: RGBWA per module
	SPECIAL 2			9-channel: RGBWA control, dimmer, color macro, strobe, dimmer speed
CALIB	**WHITE (1~11)**	**RED GREN BLUE COOL WARM AMBE**	**0~255**	Determines the white balance for the color macros
	RGBTOW			Determines the white balance when RGBTOW is active
DIMMER	**OFF**	N/A		Dimmer work in linear mode
	DIM 1			Dimmer works in non-linear mode, from fast to slow.
	DIM 2			
	DIM 3			
	DIM 4			
STATIC	**RED**	**0~255**		Configures the static color and effect
	GREN			
	BLUE			
	COOL			
	WARM			
	AMBR			
	STRB			
SETTINGS	**COLOR**	**OFF**		Maximum output, unbalanced white
		RGBTOW		White output is as per **CALIB** > **RGBTOW** settings
		UC		Output matches that of product's previous versions
	RESET	**NO/YES**		Resets unit to factory default settings

DMX Values

ARC FULL

Channel	Function	Value	Percent/Setting
1	**Dimmer**	000 ó 255	0~100%
2	**Red**	000 ó 255	0~100%
3	**Green**	000 ó 255	0~100%
4	**Blue**	000 ó 255	0~100%
5	**Color Macros**	000 ó 010 011 ó 035 036 ó 060 061 ó 085 086 ó 110 111 ó 135 136 ó 160 161 ó 185 186 ó 210 211 ó 215 216 ó 220 221 ó 225 226 ó 230 231 ó 235 236 ó 240 241 ó 245 246 ó 250 251 ó 255	No function R: 100% G: Up B: 0% R: Down G: 100% B: 0% R: 0% G: 100% B: Up R: 0% G: Down B: 100% R: Up G: 0% B: 100% R: 100% G: 0% B: Down R: 100% G: Up B: Up R: Down G: Down B: 100% White 1: 3,200 K White 2: 3,400 K White 3: 4,200 K White 4: 4,900 K White 5: 5,600 K White 6: 5,900 K White 7: 6,500 K White 8: 7,200 K White 9: 8,000 K
6	**Strobe**	000 ó 005 006 ó 255	No function Slow~Fast
7	**Dimmer Speed**	000 ó 009 010 ó 069 070 ó 129 130 ó 189 190 ó 255	Off Speed 1 (Fastest) Speed 2 Speed 3 Speed 4 (Slowest)

ARC 1

Channel	Function	Value	Percent/Setting
1	**Red**	000 ó 255	0~100%
2	**Green**	000 ó 255	0~100%
3	**Blue**	000 ó 255	0~100%

ARC 1 + D

Channel	Function	Value	Percent/Setting
1	**Dimmer**	000 ó 255	0~100%
2	**Red**	000 ó 255	0~100%
3	**Green**	000 ó 255	0~100%
4	**Blue**	000 ó 255	0~100%

ARC 2 + D

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%
2	Red	000 ó 255	0~100%
3	Green	000 ó 255	0~100%
4	Blue	000 ó 255	0~100%
5	White	000 ó 255	0~100%

ARC 3

Channel	Function	Value	Percent/Setting
1	Red	000 ó 255	0~100%
2	Green	000 ó 255	0~100%
3	Blue	000 ó 255	0~100%
4	White	000 ó 255	0~100%
5	Amber	000 ó 255	0~100%

ARC 3 + D

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%
2	Red	000 ó 255	0~100%
3	Green	000 ó 255	0~100%
4	Blue	000 ó 255	0~100%
5	White	000 ó 255	0~100%
6	Amber	000 ó 255	0~100%

SOLID

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%

SPECIAL 1

Channel	Function	Value	Percent/Setting
1	Module 1Red	000 ó 255	0~100%
2	Module 1Green	000 ó 255	0~100%
3	Module 1Blue	000 ó 255	0~100%
4	Module 1White	000 ó 255	0~100%
5	Module 1Amber	000 ó 255	0~100%
6	Module 2Red	000 ó 255	0~100%
7	Module 2Green	000 ó 255	0~100%
8	Module 2Blue	000 ó 255	0~100%
9	Module 2White	000 ó 255	0~100%
10	Module 2Amber	000 ó 255	0~100%

SPECIAL 2

Channel	Function	Value	Percent/Setting
1	**Dimmer**	000 ó 255	0~100%
2	**Red**	000 ó 255	0~100%
3	**Green**	000 ó 255	0~100%
4	**Blue**	000 ó 255	0~100%
5	**White**	000 ó 255	0~100%
6	**Amber**	000 ó 255	0~100%
7	**Color Macros**	000 ó 010	No function
		011 ó 035	R: 100% G: Up B: 0%
		036 ó 060	R: Down G: 100% B: 0%
		061 ó 085	R: 0% G: 100% B: Up
		086 ó 110	R: 0% G: Down B: 100%
		111 ó 135	R: Up G: 0% B: 100%
		136 ó 160	R: 100% G: 0% B: Down
		161 ó 185	R: 100% G: Up B: Up
		186 ó 210	R: Down G: Down B: 100%
		211 ó 215	White 1: 3,200 K
		216 ó 220	White 2: 3,400 K
		221 ó 225	White 3: 4,200 K
		226 ó 230	White 4: 4,900 K
		231 ó 235	White 5: 5,600 K
		236 ó 240	White 6: 5,900 K
		241 ó 245	White 7: 6,500 K
		246 ó 250	White 8: 7,200 K
		251 ó 255	White 9: 8,000 K
8	**Strobe**	000 ó 005	No function
		006 ó 255	Slow~Fast
9	**Dimmer Speed**	000 ó 009	Off
		010 ó 069	Speed 1 (Fastest)
		070 ó 129	Speed 2
		130 ó 189	Speed 3
		190 ó 255	Speed 4 (Slowest)

5. Technical Information

Product Maintenance

To maintain optimum performance and minimize wear, the user should clean the products frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a rule, the user should clean the products at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced light source life and increased mechanical wear.

Always dry the external optics and glass surfaces carefully after cleaning them.

To clean a product, follow the below recommendations:

- Disconnect the product from power.
- Wait until the product has cooled.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the product.
- Clean all external glass optics and glass surfaces with a mild solution of glass cleaner or isopropyl alcohol, and a soft, lint-free cotton cloth or a lens cleaning tissue.
- Apply the solution directly to the cloth or tissue and drag any dirt and grime to the outside of the lens.
- Gently polish the external glass surfaces until they are free of haze and lint.

Product Repairs

If you still experience technical problems after trying the solutions in the Troubleshooting Table, contact ILUMINARC® Technical Support.

ILUMINARC® strongly advises you against attempting any repairs to this product unless you are an authorized ILUMINARC® technician.

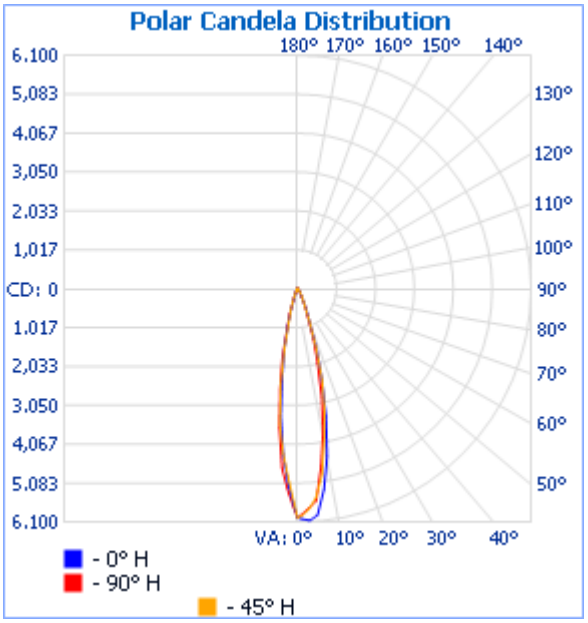
ILUMINARC® presents the information contained in the Troubleshooting Table as a guide only. In most cases, opening the product's housing will invalidate its warranty, unless there is a written indication to the contrary.

Troubleshooting Guide

Symptom	Cause(s)	Action(s)
Low light intensity	Dirty lens assembly	Clean the product regularly
	Misaligned lens assembly	Install/adjust lens assembly properly
Group of LEDs not illuminating	Faulty LED	Return for service to Iluminarc®
	Faulty LED driver	Return for service to Iluminarc®
One LED does not illuminate	Faulty LED	Return for service to Iluminarc®
	Faulty LED driver	Return for service to Iluminarc®
No LEDs illuminate	Faulty LED board	Return for service to Iluminarc®
	Faulty LED driver board	Return for service to Iluminarc®
Circuit breaker/fuse keeps tripping/blowing	Excessive circuit load	Check total load placed on the electrical circuit
	Short circuit along the power wires	Check for a short in the electrical wiring
Product does not power up	No power	Check for power on power outlet
	Loose or damaged power cord	Check power cord
	Faulty internal power supply	Return for service to Iluminarc®
Product does not respond to DMX	Wrong DMX addressing	Check Control Panel and unit addressing
	Damaged DMX cables	Check DMX cables
	Wrong polarity on the controller	Check polarity switch settings on the controller
	Loose DMX cables	Check cable connections
	Faulty DMX interface	Return for service to Iluminarc®
	Faulty Display/Main board	Return for service to Iluminarc®
DMX signal problems	Non DMX cables	Use only DMX compatible cables
	Bouncing signals	Install terminator as suggested
	Long cable / low level signal	Install an optically coupled DMX splitter right after the product with the strong signal
	Too many products	Install an optically coupled DMX splitter after unit #32 or before
	Interference from AC wires	Keep DMX cables separated from power cables or fluorescent/black lights

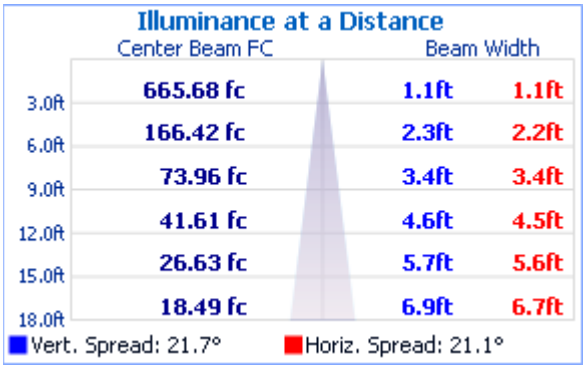
Photometrics

Filename: **Ilumipanel 180 IP Optic RGBWA 30 degree at full single panel**
Manufacturer: ILUMINARC
Luminaire: Ilumipanel 180IP Optic RGBWA 30 degrees
Luminaire Cat: 13180001
Lamp: 22 Red, 20 Green, 24 Blue, 12 Amber, 12 White
Lamp Output: 1 lamp(s), rated Lumens/lamp 1500
Max Candela: 6,068.5 at Horizontal: 0°, Vertical: 3°
Input Wattage: 297.3
Luminous Opening: Point
Test: 20101207RGBWA30
Test Lab: Iluminarc R&D Optics Laboratory
Photometry : Type B
CIE Class: Direct
Cutoff Class: Full Cutoff



Flood Summary

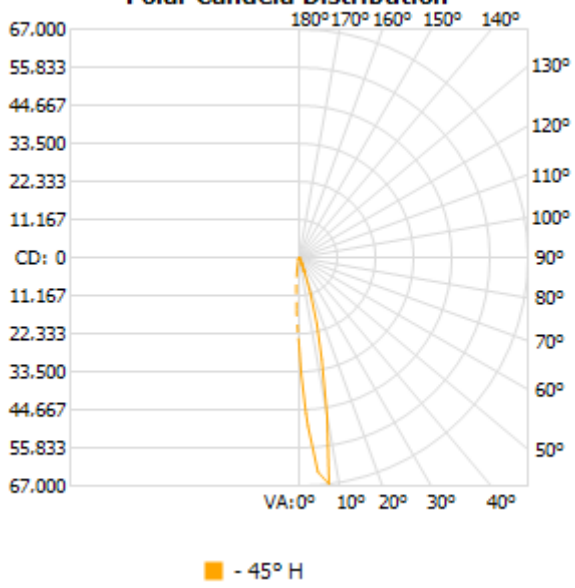
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	59.7%	868.1	39	39.7
Beam (50%):	30.7%	459.9	21.1	21.7
Total:	70.5%	1,057		


Illuminance at a Distance
Center Beam FC
Beam Width
3.0ft 665.68 fc 1.1ft 1.1ft
6.0ft 166.42 fc 2.3ft 2.2ft
9.0ft 73.96 fc 3.4ft 3.4ft
12.0ft 41.61 fc 4.6ft 4.5ft
15.0ft 26.63 fc 5.7ft 5.6ft
18.0ft 18.49 fc 6.9ft 6.7ft
Vert. Spread: 21.7°
Horiz. Spread: 21.1°

Photometics Pro 1.3.2 copyright 2003-2008 by jSolutions, Inc.
Reported data calculated from manufacturer's data file, based on IES recommended methods.

Filename: **Ilumipanel 180 IP Optic RGBWA single head 15 degree at full**
Manufacturer: ILUMINARC
Luminaire: Ilumipanel 180 IP Optic RGBWA single head 15 degrees
Luminaire Cat: 13180000
Lamp: 22 Red, 20 Green, 24 Blue, 12 Amber, 12 White
Lamp Output: 1 lamp(s), rated Lumens/lamp: 7960
Max Candela: 66,976.5 at Horizontal: 75, Vertical: 5
Input Wattage: 301.2
Luminous Opening: Point
Test: 20101207RGBWA15
Test Lab: Iluminarc R&D Optics Laboratory
Photometry : Type B
CIE Class: Direct
Cutoff Class: Full Cutoff

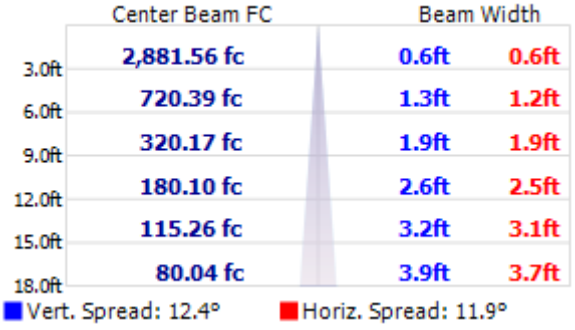
Polar Candela Distribution



Flood Summary

	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	46.2%	3675.8	25.9	25.1
Beam (50%):	19.4%	1547.4	11.9	12.4
Total:	64.9%	5,168.4		

Illuminance at a Distance



Photometics Pro 1.3.2 copyright 2003-2008 by jSolutions, Inc.
Reported data calculated from manufacturer's data file, based on IES recommended methods.

LED Disclaimer

LED Life

ILUMINARC® rates LED lifetime based on lumen depreciation of 70% of the original output, with data provided by the manufacturer of the LED. Data from the manufacturer of the LED are not independently verified or measured by ILUMINARC®. When the product is operating in optimal environmental conditions, the LED lifetime is rated to be 50,000 to 70,000 hours by the LED manufacturer.

LED Binning

LED manufacturers sort LEDs into "bins", based on variances in color, output intensity and the frequency at which the semiconductor operates. ILUMINARC® strives to hold its LED manufacturers to the highest standards of binning to optimize consistency in output from product to product. However, the availability of a single bin cannot be guaranteed. With that in mind, ILUMINARC® has developed a rigorous control system to seek the best achievable consistency in color and output.

Color Rendering Index (CRI)

CRI is an industry standard method to compare properties of different types of light sources. There are known limitations and inconsistencies related to CRI. Results may vary depending on the environmental factors involved. For this reason, the US Department of Energy (DOE) states that CRI should be considered as one point of reference among others in evaluating white LED products and systems.

The following is an excerpt of recommendations from the DOE:

1. Identify the visual tasks to be performed under the light source. If color fidelity under different light sources is critically important (for example, in a space where color or fabric comparisons are made under both daylight and electric lighting), CRI values may be a useful metric for rating LED products.
2. CRI may be compared only for light sources of equal CCT. This applies to all light sources, not only to LEDs. Also, differences in CRI values of less than five points are not significant, e.g., light sources with 80 and 84 CRI are essentially the same.
3. If color appearance is more important than color fidelity, do not exclude white light LEDs solely on the basis of relatively low CRI values. Some LED products with CRIs as low as 25 still produce visually pleasing white light.
4. Evaluate LED systems in person and, if possible, on-site when color fidelity or color appearance are important issues.

Source: DOE publication: PNNL-SA-56891, January 2008

DO NOT write the RMA # directly on the box. Instead, write it on a properly affixed label.

ILUMINARC® reserves the right to use its own discretion to repair or replace returned product(s).

Always keep the original box and all packaging material as you will need those to ship the unit back to ILUMINARC®

Returns Procedure

The user must send the merchandise prepaid, in the original box, and with its original packing and accessories. ILUMINARC® will not issue call tags.

Call ILUMINARC® and request a Return Merchandise Authorization Number (RMA #) before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

The user must clearly label the package with a Return Merchandise Authorization Number (RMA #). ILUMINARC® will refuse any product returned without an RMA #.

Once you receive the RMA #, please include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- The RMA #
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. As a suggestion, proper FedEx packing or double-boxing is the shipping method ILUMINARC® recommends.

Contact Us

USA WORLD HEADQUARTERS

General Information – ILUMINARC
Address: 5200 NW 108th Avenue
Sunrise, FL 33351
Voice: (954) 923-3680
Fax: (800) 544-4898

Technical Support
Voice: (800) 762-1084
Email: support@iluminarc.com

World Wide Web www.iluminarc.com

EUROPE

General Information - Chauvet Europe BVBA
Address: Stokstraat 18
9770 Kruishoutem
Belgium
Voice: +32 9 388 93 97

Technical Support
Email: Eutech@chauvetlighting.eu

World Wide Web www.chauvetlighting.eu

General Information - Chauvet Europe Ltd.
Address: Unit 1C
Brookhill Road Industrial Estate
Pinxton, Nottingham, UK
NG16 6NT
Voice: +44 (0)1773 511115
Fax: +44 (0)1773 511110

Technical Support
Email: uktech@iluminarc.com

World Wide Web
www.chauvetlighting.co.uk

MEXICO

General Information - Chauvet Mexico
Address: Av. Santa Ana 30
Parque Industrial Lerma
Lerma, Mexico C.P. 52000
Voice: +52 (728) 285-5000

Technical Support
Email: servicio@iluminarc.com.mx

World Wide Web www.chauvet.com.mx

Outside the U.S., United Kingdom, Ireland, Mexico, or Benelux contact the dealer of record. Follow their instructions to request support or to return a product. Visit our website for contact details.

Technical Specifications

Dimensions and Weight

Length	Width	Height	Weight
28.6 in (728 mm)	9.9 in (252 mm)	21 in (533 mm)	89.0 lbs (40.3 kg)

Note: Dimensions in inches rounded to the nearest decimal digit.

Electrical

Power Supply Type	Range	Voltage Selection
Switching (internal)	100~240 V, 50/60 Hz	Auto-ranging

Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	614 W (5 A)	610 W (2.7 A)

Power I/O	Input	Output
Connectors	Hard wired	N/A
Cord plug	Open ended	N/A

Light Source

Type	Power	Current	Lifespan
LED	5 W	700~1000 mA	50,000 hours

Color	Quantity
Red	44
Green	40
Blue	48
White	24
Amber	24

Photometric

Parameter	15° Panel	30° Panel
Illuminance @ 5 m	1241 Lux	287 Lux
Beam angle	12.2°	21.4°
Field angle	25.5°	39.3°

Thermal

Max. External Temperature	Cooling System
104° F (40° C)	Fan assisted convection via Integrated Cooling Enhancement™

DMX

I/O Connectors	Connector Type	Channel Range
IP Gland Nut	N/A	1,3, 4, 5, 6, 7, 9, 10

Ordering

Ilumipanel 180 IP Optic 15/30 RGBWA
13180004

CONFORMS TO UL STD. 1573
CERTIFIED TO CSA STD. C22.2 No. 166
3144482